



What is the Route 301 – Port Royal Arterial Management Study?

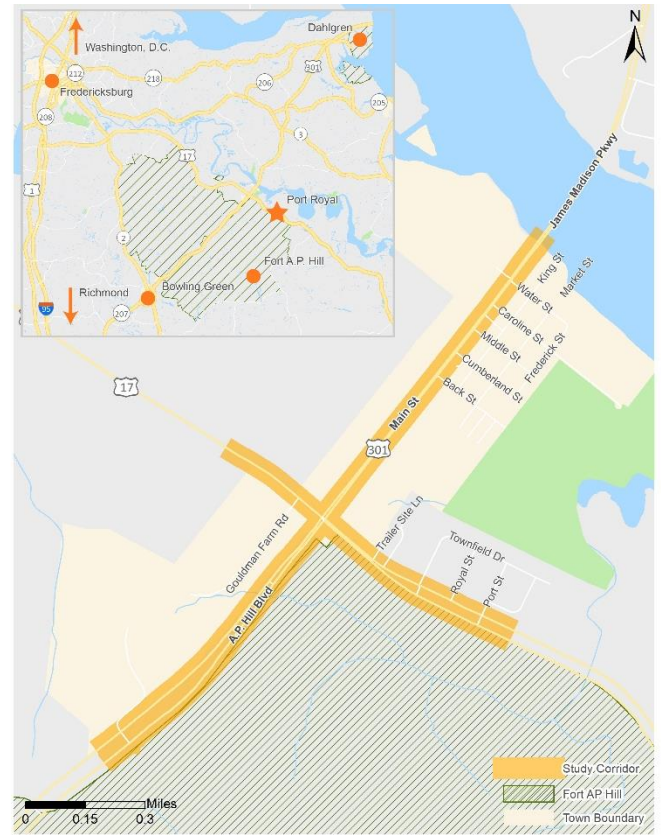
Through the Port Royal Arterial Management Study, the Virginia Department of Transportation (VDOT) has engaged the Town of Port Royal to identify and compare potential transportation investments along the Route 301 Corridor through the Town of Port Royal (Main Street between Route 17 and the Rappahannock River Bridge). This study follows VDOT's Route 301/207 Arterial Preservation Study of the forty-two miles of Route 301/207 from I-95 in Caroline County to the Potomac River/Maryland State Line designed to ensure the safety and preserve the capacity of this critical link in the Commonwealth's arterial highway network. Unique natural, historical and environmental assets present within the Town of Port Royal, as well as its role as a local business and civic destination, presented the opportunity to identify and assess possible changes to the roadway in greater detail.

Study Area Context and Challenges

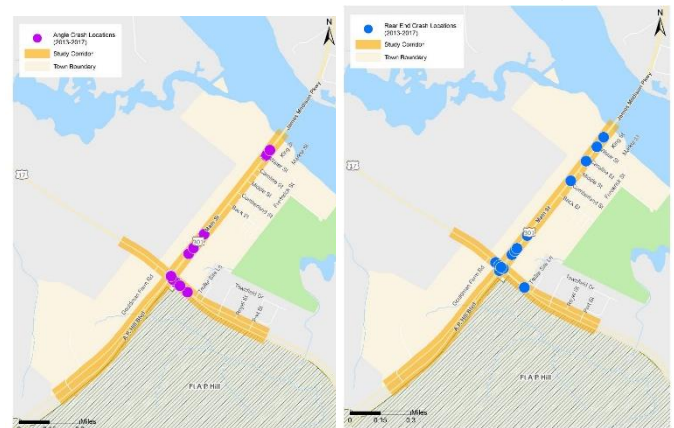
- The intersection of Route 301 and Route 17 is a rural crossroads of business and civic uses, and major regional travel flows
- The Town of Port Royal is an area of statewide importance due to its historical, cultural, and natural resources
- Traffic analysis shows southbound traffic backing up at the intersection of Route 301 and Route 17 during certain conditions (e.g. holiday weekends)
- Existing traffic analysis shows motorist difficulty turning into and out of town streets and businesses along Route 301



- VDOT took steps to reduce speeding on Route 301 through town with new radar activated speed limit signs (in place since October 2018)



- A majority of crashes that have occurred in the study area over the past five years have involved rear end or angle crash types (typically related to turning movements)
- Public concerns shared through an online survey include roadway speed, safety, access onto and off of Route 301 from the Town, and congestion
- Public interest in the online survey about Route 301 through the Town extends beyond Town limits (49% travel through vs. 19% who live, own a business, or work in Town, vs. 14% who live near Town)



Angle (left) and rear (end) crashes along the study corridor (2013-2017)



The Process

Establish Goals

- **Goal 1:** Enhance mobility for existing users and to attract a wider range of potential users
- **Goal 2:** Promote safe travel options for all users
- **Goal 3:** Invest in change that builds on existing community, historic, and natural resources
- **Goal 4:** Invest in multimodal improvements with a high return on investment

Involve the Public

- Online Survey-**180** Respondents
- December 2018 Community Meeting-**26+** attendees

Identify and Compare Alternatives

VDOT and its partners identified **six transportation options**. Described below, each option is feasible, with the potential to move forward independently or in combination. Options have been assessed for their ability to meet project goals and objectives including estimated construction cost and property impact levels.

What Options Have Been Identified?

Intersection of Route 301 and Route 17

Option A: Improvements to Existing Intersection

- Optimize signal operations
- Provide an additional southbound left-turn-lanes on Route 301 (Dual-Left-Turn Lanes)
- Provide dedicated westbound left-turn-lane on Route 17
- Add pedestrian accommodations

Option B: Quadrant Intersection

- Build a new connector "Quadrant Roadway" in the northeast corner of the existing intersection to serve northbound and southbound left turns
- Divert heavy southbound left turn volume prior to existing intersection of Route 301 and Route 17
- Reduce number of signal phases/cycle length at existing intersection of Route 301 and Route 17; provides two new coordinated signals at the secondary connections
- Permits access to northeast properties from minor street

Option C: Market Street Extension

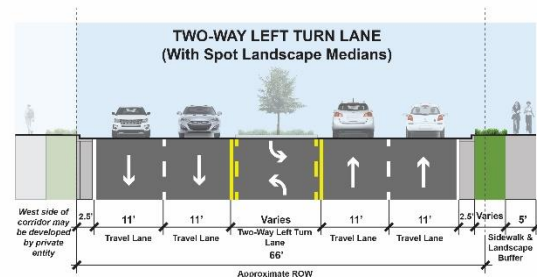
- Extend Market Street south to Route 17, providing increased connectivity to the Town of Port Royal
- Increases safety by reducing the need for residents of Port Royal to make left turns from and onto Route 301

- May be combined with the Quadrant Roadway option or may stand-alone, connecting directly to Route 17

Route 301 through Town

Option A: Two-Way Left-Turn Lane

- Provides a center turning lane for northbound and southbound left turning movements on Route 301
- Adds pedestrian accommodations with "spot-median" locations for crossing Route 301 and landscaping as visual cue for motorists passing through town zone



Option B: Full Raised Median

- Reduces the number of turning point conflicts and provides protected left turns on Route 301
- Provides an acceleration lane on Route 301 southbound from Caroline Street
- Adds pedestrian accommodation with crosswalk locations, including median refuge areas
- Permits median landscaping as visual cue through town

Option C: One-Way Pair "Couplet"

- Construct a new two-lane roadway, paralleling Route 301 to the west, for southbound traffic
- Convert existing Route 301 to a two-lane roadway for northbound traffic
- Provides future opportunity to expand grid pattern to west side of Route 301
- Provides opportunities for pedestrian accommodation

Next Steps for Port Royal

VDOT will detail study findings in an upcoming **Final Report** that will also connect each possible transportation option to VDOT SMART SCALE funding criteria. **Caroline County** and/or the **George Washington Regional Commission**, in cooperation with the Town of Port Royal, may submit any one or set of these options as a SMART SCALE application for VDOT funding. Stay informed by visiting: http://www.virginiadot.org/projects/fredericksburg/route-301-corridor-study-in-town-of-port-royal.asp_